Environmental Restoration (ER) Project Cerro Grande Fire Accelerated Action Information Sheet

Potential Release Site (PRS) 27-002 Firing Sites (Abandoned)

Technical Area (TA)-27 was located in Pajarito Canyon. Now part of TA-18, TA-27 was first used by the Laboratory during the Manhattan Project in 1944. Firing sites were used for experimental test shots employing high explosives and various metals, including depleted uranium.

PRS History: PRS 27-002 consists of five firing pits situated on either side of Pajarito Road approximately 0.9 miles from TA-18 and east of the former sewage lagoons in Pajarito Canyon. The firing pits were used for explosive testing that involved materials such as thorium, depleted uranium, beryllium, and lead. Firing Pit 1 is located in the grassy area 105-feet south of the TA-36 fence. Firing Pits 2 and 3 are between the fence and Pajarito Road; Firing Pit 4 lies under the road (i.e., it has been destroyed by road construction). Firing Pit 5, the only one not backfilled, is located on a small curve on the road's north side.

No Laboratory operations have taken place at TA-27 since 1947. In 1946 a bullet sensitivity test at Firing Pit 1 caused a block of explosive to undergo a low-order explosion, scattering unexploded high explosives over a 250-yard radius. Safety personnel made several visits to the site in the 1960s and 1970s to pick up high explosives fragments. However, some pieces could have been hidden by grass, covered by topsoil, or buried when four pits were backfilled during decommissioning of the site in the 1960s. During the 1960's, all structures, concrete foundations, and other debris were removed and the ground surface was leveled. In 1969, the sanitary wastewater lagoons and sewer line from TA-18 were built. All of the firing pits, except Firing Pit 4, have been filled in. Pajarito Road, passing by the sites, was relocated from its 1947 location, and although



there has been significant excavation for removal of gravel from the vicinity of the firing pits, none of the pits underlies the present alignment of the road. Radiation monitoring of the rubble done in 1988 did not reveal beta or gamma exposure rates above background levels.

PRS 27-002 is listed on the Hazardous and Solid Waste Amendments module to the Laboratory's Hazardous Waste Facility permit. The ER Project proposed the site for no further action; PRS 27-002 received a Notice of Deficiency or disapproval letter from the Administrative Authority denying listing for no further action. There are indications of residual risk at the site.

Issues of Concern: The area upstream of PRS 27-002 burned during the Cerro Grande fire (a fire intensity rating of low to high). There is potential for erosion or scouring because the pits have surface components. There is no debris on the site that could enter the flood watercourse, nor are there any structures that could interfere with or be impacted by flood mitigation efforts.

Accelerated Action Status: PRS 27-002 was evaluated after the Cerro Grande fire; it is listed as a potential candidate for additional characterization because the nature and extent of contamination at the site has not been defined.

Related Documents: LA-UR-93-422; November 2, 1995